ABSTRACT

A device for detecting a road traveling lane, which is capable of stably defining a position of a boundary of a traveling lane. The device has edge point detection means (ED) for detecting a plurality of edge points in a contour on an image, edge histogram producing means (HD) for producing a vertical edge histogram for horizontal elements of the plurality of edge points, block marking line determination means (BD) for determining presence and absence of a block-like marking line on the basis of periodicity of distribution and a combination of distributions of plus edges and minus edges in the vertical edge histogram, and lane boundary edge detection means (MD) for detecting vertical edge points present outside (relative to the center of the traveling lane) of a region where the block-like marking line is present. And, according to lane boundary position defining means (LD), it is so constituted to define a position of a curve fitted to the vertical edge points, as the position of the boundary of the traveling lane.